CORRECTED VERSION

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 30 June 2005 (30.06.2005)

PCT

(10) International Publication Number WO 2005/058867 A1

(51) International Patent Classification⁷: C07D 333/54, 335/06, A61K 31/38, A61P 11/00

(21) International Application Number:

PCT/EP2004/014381

(22) International Filing Date:

15 December 2004 (15.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0329182.0

17 December 2003 (17.12.2003) GI

(71) Applicant (for all designated States except US): GLAXO GROUP LIMITED [GB/GB]; Glaxo Wellcome House, Berkeley Avenue, Greenford Middlesex UB6 0NN (GB).

(72) Inventor; and

- (75) Inventor/Applicant (for US only): BIGGADIKE, Kelth [GB/GB]; GlaxoSmithKline, Gunnels Wood Road, Stevenage Hertfordshire SG1 2NY (GB).
- (74) Agent: FLORENCE, Julia, Anne; GlaxoSmithKline, Corporate Intellectual Property CN925.1, 980 Great West Road, Brentford Middlesex TW8 9GS (GB).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW,

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Rurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

(48) Date of publication of this corrected version:

9 September 2005

(15) Information about Correction:

see PCT Gazette No. 36/2005 of 9 September 2005, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BENZOTHIOPHENE-AND THIOCHROMENE CONTAINING PHENETHANOLAMINE DERIVATIVES FOR THE TREATMENT OF RESPIRATORY DISORDERS

Ar—CHCH₂NHCR³R⁴(CH₂)_m—O—(CH₂)_n

$$(CR^aR^b)_{2} S(O)_{2} \qquad (I)$$
OH

(57) Abstract: Compounds of formula (I) and salts, solvates, and physiologically functional derivatives thereof, useful for the prophylaxis or treatment of a clinical condition for which a selective β_2 -adrenoreceptor agonist is indicated, for example asthma or chronic obstructive pulmonary disease (COPD).